What is claimed is:

1. An apparatus for determining fibre lengths and fibre length distribution from a fibre material sample, comprising a conveyor device for conveying the fibre material, a take-up device for taking up a length of fibre material which can be separated from the conveyor device, and a transport arrangement for conveying the separated length of fibre material to a combing device, at least one end of the length of fibre material being combable by the combing device to form a combed fibre fringe, which combed fibre fringe is subsequently detectable by a measuring device.

2. An apparatus according to claim 1, in which the conveyor device comprises at least one element selected from conveyor belts and rollers.

3. An apparatus according to claim 1, in which the conveyor device comprises a drawing device.

4. An apparatus according to claim 3, in which the draft of the drawing device is adjustable for varying the number of fibres per unit length of the fibre material and/or per unit width of the fibre material.

5. An apparatus according to claim 1, further comprising a clamping element downstream of the take-up device.

6. An apparatus according to claim 5, in which the clamping element is slidably displaceable with respect to the take-up device.

7. An apparatus according to claim 1, in which the conveyor device clamps the fibre material such that it can be torn off.

8. An apparatus according to claim 1, in which the take-up device comprises a clamping device.

9. An apparatus according to claim 8, in which the clamping device comprises at least one movable clamping jaw.

10. An apparatus according to claim 1, in which the take-up device and the conveyor device are movable relative to one another.

11. An apparatus according to claim 10, in which the take-up device is movable in relation to the conveyor device such that, in use, the fibre material tears away from the conveyor device.

12. An apparatus according to claim 1, in which the combing device comprises at least one rotating combing roller.

13. An apparatus according to claim 12, in which the speed of the combing roller is adjustable.

14. An apparatus according to claim 12, in which the direction of rotation of the combing roller is adjustable.

15. An apparatus according to claim 1, in which relative movement between the take-up device and the combing device is adjustable.

16. An apparatus according to claim 1, in which there is a cleaning device for cleaning the combing device.

17. An apparatus according to claim 1, further comprising an aligning device for aligning fibres within said combed end or ends.

18. An apparatus according to claim 1, further comprising a measuring device for determining fibre lengths and/or fibre length distribution in said combed end or ends.

19. An apparatus according to claim 18 in which the measuring device is arranged to reciprocate across the fibre material for effecting said determination.

20. An apparatus according to claim 1, further comprising an electronic control device, to which there is connected at least one element selected from a drive motor for the conveyor device, an actuator for a clamping movement of the take-up device, an actuator for moving at least one aligning device, a drive motor for the combing device and an actuator for moving a measuring device.

21. An apparatus according to claim 1, which is arranged to collect fibre material before treatment thereof with clothed elements.

22. An apparatus according to claim 21, which is arranged to collect fibre flocks (tufts).

23. An apparatus according to claim 1, which is arranged to collect fibre material after treatment thereof with clothed elements.

24. An apparatus according to claim 23, which is arranged to collect fibre sliver.

25. An apparatus according to claim 1, comprising a control device in which determined values for a fibre length and fibre length distribution from a feed region of a spinning preparation machine can be compared with determined values for a delivery region of the machine.

26. An apparatus according to claim 1, comprising a control device in which determined values of fibre length distribution for sliver subjected to aggressive processing and sliver subjected to gentle processing can be compared.

27. An apparatus according to claim 28, which is arranged to determine from the measured fibre lengths and/or fibre length distributions a characteristic number relating to fibre stress during processing and/or a characteristic number relating to the extent of fibre hooks in the sliver.

28. An apparatus according to claim 1, which is connected to a control system of a spinning preparation machine, the arrangement being such that the settings of the spinning preparation machine are adjustable in dependence on the determined measurements of fibre length and fibre length distribution.

29. An apparatus according to claim 28, in which the machine is a card.